Appl. No. 09/550,596 Amdt. dated November 25, 2003 Reply to Office action of May 28, 2003

## Amendments to the Claims:

- 1-23. (Canceled)
- 24. (New) An optical device comprising:
  - a laser comprising:

a reflecting mirror;

an output face comprising a reflection coefficient, the reflecting mirror and the output face forming a cavity there between; and

a gain medium optically coupled between the reflecting mirror and the output face within the cavity such that the cavity has a gain curve with a maximum at a wavelength  $\lambda_{max}$ ; and

an optical waveguide coupled to the cavity, the optical waveguide including an optical reflector defining a reflection peak coefficient at a wavelength  $\lambda$  that is less than the wavelength  $\lambda_{max}$  by at least 10 nanometers at ambient temperature.

- 25. (New) The optical device of claim 24, wherein the wavelength  $\lambda$  is less than the wavelength  $\lambda_{max}$  by 15 nm  $\pm$  5nm.
- 26. (New) The optical device of claim 24, wherein the wavelength  $\lambda$  is less than the wavelength  $\lambda_{max}$  by 13 nm when an operating temperature is equal to 25°C.
- 27. (New) The optical device of claim 25, wherein the wavelength  $\lambda$  is less than the wavelength  $\lambda_{max}$  by 13 nm when an operating temperature is equal to 25°C.
- 28. (New) The optical device of claim 24, wherein the optical reflector is a grating with a reflection coefficient that is more than 10 times greater than the reflection coefficient of the output face.
- 29. (New) The optical device of claim 28, wherein the wavelength  $\lambda$  is less than the wavelength  $\lambda_{max}$  by 13 nm when an operating temperature is equal to 25°C.

Appl. No. 09/550,596 Amdt. dated November 25, 2003 Reply to Office action of May 28,2003

- 30. (New) The optical device of claim 24, wherein the output face has a reflection coefficient of about 0.1%.
- 31. (New) The optical device of claim 30, wherein the optical reflector is a grating with a reflection coefficient of less than about 5%.
- 32. (New) The optical device of claim 31, wherein the grating has a reflection coefficient of about 1%.
- 33. (New) The optical device of claim 24, wherein the optical waveguide is an optical fiber.
- 34. (New) The optical device of claim 24, wherein the laser is a quantum well laser.
- 35. (New) The optical device of claim 24, wherein the laser is a laser diode including an epitaxied quantum well structure.
- 36. (New) The optical device of claim 24, wherein the laser comprises an InGaAs semiconducting medium.
- 37. (New) The optical device of claim 24, wherein the optical waveguide is optically coupled to the cavity by a first collimating lens and a focusing lens that focuses light toward the optical waveguide.
- 38. (New) The optical device of claim 24, wherein the optical waveguide is an optical fiber and the optical reflector is a fiber Bragg grating.
- 39. (New) The optical device of claim 38, wherein the wavelength  $\lambda$  is less than the wavelength  $\lambda_{max}$  by 13 nm when an operating temperature is equal to 25°C.